

## REMARKS

Claims 1-27 pending in the application. Claims 1-27 stand rejected.

Claims 1, 10, 15, 20, 22, 24 and 26 have been amended in this Response. Claims have been added. No new matter has been added. Applicant respectfully requests reconsideration of the pending claims in light of these amendments and the following remarks.

### A. Rejections of Claims 1,10, 16, 20, 22-24 and 26 Under 35 U.S.C. § 103

In the Office Action dated June 16, 2004, the Examiner rejected Claims 1, 10, 16, 20, 22-24 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Huang, et al. (U.S. Patent No 6,151,582) (**HU**), in view of Rumbaugh, et al. (Object oriented modeling and Design, 1991) (**RU**). Applicant respectfully submits this rejection is traversed.

The Examiner states that **HU** teaches “a simulation system used by an operator and including source of input data, a display, and a simulator adapted to be executed by a processor and generating a set of simulation results during the execution in response to the input data ..., an organizing and managing system..., one or more of the sets and supersets of test data..., editing means..., and the simulator generating a set of simulation results....” The Examiner further states that **HU** “teaches a case manager adapted for storing a plurality of sets and supersets of test data files, the sets and supersets of test data files being stored in the case manager in the form of a tree like structure.” The Examiner acknowledges, however, that **HU** does not teach the sets and supersets of test data files being stored in the case manager in the form of a non-conventional tree like structure, the tree like structure being non-conventional in that the supersets underlying corresponding ones of the sets in the tree-like structure.” The

Examiner asserts that this deficiency is met by the **RU** reference. Applicant respectfully disagrees.

In responding to Applicant's previous amendments and arguments, the Examiner in the instant Office Action states:

"Database organization is conceptual, all done by linked lists, starting from one element and proceeding to other elements. The links indicate that the data in the linked sets are related. There is no constraint in the database to limit the amount of data in various sets connected by the links and the type of data in the sets. Similarly, the data hierarchy is also conceptual. The database does not use data hierarchy since linked lists are used."

(Office Action, June 16, 2004, paragraph 8, pp. 30-31.) Applicant is not certain whether the Examiner means that he believes the database of Fig. 3.23 uses "linked lists" or that the present invention uses linked lists. Applicant does not believe that either uses linked lists.

The present invention does not use linked lists. Linked lists are understood to be one-dimensional, that is, each record in a linked list has only one preceding record and only one next record. Claim 1 was previously amended to clarify that the non-conventional tree like structure is hierarchical in nature. Claim 1 has been amended herein to clarify the hierarchical nature of such tree structures:

1. In a simulator system and used by an operator and including a source of input data, a display, and a simulator adapted to be executed by a processor and generating a set of simulation results during the execution in response to said input data, an organizing and managing system operatively interconnected between the source of the input data and said simulator and said display, comprising:

a case manager adapted for storing a plurality of sets and supersets of test data files, said sets and supersets of test data files being stored in said case manager in the form of a hierarchical, non-conventional tree like structure, having a root and one or more leaves, the tree like structure being non-conventional in that said supersets underlying corresponding ones of said sets in said tree like structure, such that one or more of said sets is situated between the root and the corresponding superset, and further comprising one or more of said sets and said supersets of said test data files adapted to be selected by said operator; and

editing means responsive to said one or more of said sets and said supersets of said test data files selected by said operator via said case manager and responsive to said input data for editing said test data files and said input data in response to editing actions taken by said operator and generating a set of edited test data files, said simulator generating said set of simulation results during the execution of said simulator in response to said set of edited test data files.

Referring to Fig. 3.23 of **RU**, the figure is entitled "A multi-level inheritance hierarchy with instances." The Examiner states, " The database does not use data hierarchy since linked lists are used." Both the reference and the present invention are hierarchical, so Applicant respectfully asserts that neither uses linked lists.

In addition, because both Fig. 3.23 of the reference and the instance invention use hierarchical tree like structure, the tree like structure is understood to have a "root" commonly shown at the top of the page and "leaves" commonly shown at the bottom of the page. Webster's New World Dictionary of Computer Terms, compiled by Donald Spencer, pub. by MacMillan, USA, 1994 (at p. 502) defines "root" as "The top element or node in a tree diagram, from which branches extend eventually to leaf nodes." "Leaf" is defined at p. 327 as "The terminal node of a tree diagram." Applicant believes it would be understood by those of ordinary skill in the art that trees start at a root, commonly shown at the top of the page and extend through branches to eventually terminate in one

or more leaf nodes at the bottom of the page. If the diagram is turned upside down, there will still be a root (now at the bottom of the page) and one or more terminating leaves (now at the top of the page). The relative positions of the root, leaves, sets and supersets will be the same, no matter which direction the page is turned.

In conventional hierarchical tree structures, supersets are "above" their respective sets, that is, the supersets are between their corresponding sets and the root or, to put it another way, the sets are between their corresponding supersets and the leaf nodes. Alternatively, a set may comprise a leaf node. By contrast, the instant invention allows for one or more sets to be situated between their corresponding supersets and the root node. In other words, one or more supersets are situated between their corresponding sets and a leaf node, or a superset could be a leaf node for a set. This, Applicant respectfully submits, is novel over the cited references.

In **RU**, for example, the "Equipment" is the root node and the leaf nodes are centrifugal pump, diaphragm pump and plunger pump (for the pump branch) and spherical tank, pressurized tank, floating roof tank (for the tank branch). No superset in this example is between its set and corresponding leaf node. No set is between its superset and the root node. Accordingly, it is respectfully submitted that claim 1 is patentable over the combination of **HU** and **RU**.

Like claim 1, claims 10, 16, 20, 22, 24 and 26 have been amended recite the hierarchical, non-conventional tree like structure, having a root and one or more leaves, the tree like structure being non-conventional in that said supersets underlying corresponding ones of said sets in said tree like structure, such that one or more of said sets is situated between the root and the corresponding superset... Accordingly, claims

10, 16, 20, 22, 24, and 26 are thus felt to be likewise patentably distinct over the combination of **HU** and **RU**.

Claim 23 depends from claim 22 and contains all of its limitations as amended. Accordingly, Applicant respectfully submits that this rejection has also been traversed with respect to claim 23.

Accordingly, Applicant respectfully submits that this rejection has been traversed and requests reconsideration and allowance of claims 1, 10, 16, 20, 22, 23, 24 and 26

**B. Rejection of Dependent Claims 2-9, 11-14, 17-19, 21, 25 and 27 Under 35**

**U.S.C. § 103**

In the Office Action dated March 3, 2003, the Examiner rejected Claims 2-9, 11-14, 17-19, 21, 25 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Huang, et al., (U.S. Patent No. 6,151,582) (**HU**), in view of Rumbaugh, et al. (Object oriented modeling and Design, 1991) (**RU**), and further in view of Cowgill (U.S. Patent No. 5,835,566) (**CO**).

Applicant respectfully submits that these claims all depend from independent claims described in Section A above and contain all of the limitations of the independent claims, as amended, from which they depend. For the reasons described in Section A, **HU** and **BH** do not render those independent claims obvious and the addition of **CO** does not supply the deficiencies of that combination. Accordingly, Applicant respectfully submits that this rejection has also been traversed with respect to dependent claims 2, 9, 11-14, 17-19, 21, 25 and 27 and asks for reconsideration and allowance of those claims as well.

**C. Rejection of Claim 15 Under 35 U.S.C. § 103**

In the Office Action dated March 3, 2003, the Examiner rejected Claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Huang, et al., (U.S. Patent No. 6,151,582) (HU), in view of Rumbaugh, et al. (Object oriented modeling and Design, 1991) (RU), and further in view of Cowgill (U.S. Patent No. 5,835,566) (CO) and further in view of Gunsekara (U.S. Patent No. 6,018,497) (GU). Like the claims discussed in section A herein, Claim 15 as amended recites in part “and a plurality of supersets of case scenarios organized in a hierarchical, non-conventional tree-like structure, having a root and one or more leaves, the tree like structure being non-conventional in that some of said case scenarios being supersets of other of said case scenarios in the tree-like structure with said supersets underlying corresponding ones of said sets in said tree like structure, such that one or more of said sets is situated between the root and the corresponding superset, ...” (Emphasis added.) For the reasons described above in Section A, a combination of HU and BH does not disclose or suggest such a flexible, hierarchical, structure and the addition of CO and GU does not supply the deficiencies of that combination. Accordingly, Applicant respectfully submits that this rejection has also been traversed with respect to claim 15 and asks for reconsideration and allowance of claim 15 as well.

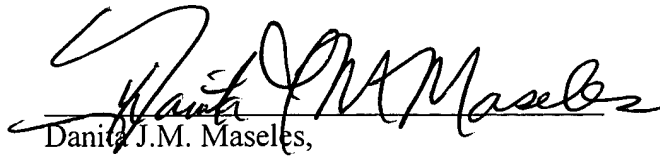
**CONCLUSION**

It is respectfully submitted that the claims of this application, as now amended, is in condition for allowance for the reasons stated above. Therefore, it is requested that the

Examiner reconsider each and every rejection as applicable to the claims now pending in the application and pass such claims to issue.

This amendment is intended to be a complete response to the Office Action dated June 16, 2004.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Danita J.M. Maseles", is written over a horizontal line.

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Enclosures:

1. Acknowledgment Postcard
2. Transmittal Form
3. Petition for Extension of Time and authorization to Charge Deposit Account (In Duplicate)
4. Fee Transmittal and authorization to Charge Deposit Account (In Duplicate)